

IN THE CLAIMS:

Please cancel Claims 4 and 6 to 8 without prejudice or disclaimer of the subject matter presented therein and without conceding the correctness of their rejections.

Please amend the claims as follows:

AI 1. (Currently Amended) A semiconductor device for transmitting information by using an induction field as a transmission medium, consisting of comprising:

an IC chip for storing and processing information to be transmitted;

an IC chip supporting section for mounting the IC chip thereon;

a coil for generating the induction field; ~~and~~

connecting terminals provided at an end of the coil; ~~and~~

~~electrically connected to the IC chip;~~

wires connecting the IC chip and the connecting terminals;

sheets of tape bonding and fixing a part of one side of the coil; and

a resin integrating the IC chip, the IC chip supporting section, the coil, the wires, the connecting terminals, and the sheets of tape with one another;

wherein the IC chip supporting section, the coil, and the connecting terminals are formed of the same metal that is patterned.

2. (Currently Amended) The semiconductor device according to claim 1, wherein the IC chip, the IC chip supporting section, the coil, the wires, ~~and~~ the connecting terminals, and the sheets of tape are encapsulated with a the resin ~~to be integrated with one~~

another.

3. (Currently Amended) The semiconductor device according to claim 2 1, wherein at least one side of the coil is exposed from a surface of the resin.

4. (Cancel)

5. (Withdrawn) The semiconductor device according to claim 2, wherein the IC chip and the connecting terminals are connected in flip chip connection.

6. (Cancel)

7. (Cancel)

8. (Cancel)

9. (Currently Amended) A method of producing a semiconductor device that transmits information by using as a transmission medium an induction field generated from a coil electrically connected to an IC chip, comprising the steps of:

preparing one sheet of metal plate;

forming a metal frame having at least a coil pattern; an IC chip supporting section for mounting the IC chip thereon; and a connecting terminal pattern formed at an end of the coil pattern, by patterning the metal plate;

mounting the IC chip on the metal frame;

electrically connecting the connecting terminal pattern to the IC chip using
wires; and

encapsulating the IC chip, IC chip supporting section, wires, sheets of tape
and the metal frame with a resin to integrate them.

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10. (Withdrawn) The method of producing a semiconductor device
according to claim 9, wherein the patterning of the metal plate is performed by stamping or
etching.

11. (Withdrawn) The method of producing a semiconductor device
according to claim 9, wherein electric connection of the connecting terminal pattern and
the IC chip is performed by wire bonding, and wherein wires formed by the wire bonding
are encapsulated with the resin.

12. (Withdrawn) The method of producing a semiconductor device
according to claim 9, wherein electric connection of the connecting terminal pattern and
the IC chip is performed in flip chip connection.

13. (Withdrawn) The method of producing a semiconductor device
according to claim 9, further comprising a step of sticking a tape for coil pattern fixation on
a part of one side of the coil pattern after the connecting terminal pattern and the IC chip

are electrically connected.

14. (Currently Amended) A method of producing a semiconductor device that transmits information by using as a transmission medium an induction field generated from a coil electrically connected to an IC chip, comprising the steps of:

preparing one sheet of metal plate;

forming a metal frame having at least a coil pattern, an IC chip supporting section for mounting the IC chip thereon, a connecting terminal pattern formed at an end of the coil pattern, and a tying section tying respective portions of the coil pattern, by patterning the metal plate;

mounting the IC chip on the metal frame on the IC chip supporting section;

electrically connecting the connecting terminal pattern to the IC chip using wires;

sticking a tape for coil pattern fixation on a part of one side of the coil pattern after the connecting terminal pattern and the IC chip are electrically connected;

cutting the tying section; and

encapsulating the IC chip, IC chip supporting section, wires, the tape and the metal frame with a resin to integrate them.

15. (Currently Amended) A method of producing a semiconductor device that transmits information by using as a transmission medium an induction field generated from a coil electrically connected to an IC chip, comprising the steps of:

preparing one sheet of metal plate;

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forming a metal frame having at least a coil pattern, an IC chip supporting section for mounting the IC chip thereon, a connecting terminal pattern formed at an end of the coil pattern, an outer frame section, and tying sections tying respective portions of the coil pattern and tying the coil pattern and the outer frame section, by patterning the metal plate;

mounting the IC chip on the metal frame on the IC chip supporting section;

electrically connecting the connecting terminal pattern to the IC chip using wires;

sticking a tape for coil pattern fixation on a part of one side of the coil pattern after the connecting terminal pattern and the IC chip are electrically connected;

cutting the tying section tying respective portions of the coil pattern;

encapsulating the IC chip, the IC chip supporting section, wires, the tape and the metal frame with a resin to integrate them;

and cutting the tying section tying the coil pattern and the outer frame section.

16. (Withdrawn) The method of producing a semiconductor device according to claim 15, wherein a plurality of semiconductor devices is produced from the one sheet of the metal plate.

17. (Currently Amended) A method of producing a semiconductor device that transmits information by using as a transmission medium an induction field generated from a coil electrically connected to an IC chip, comprising the steps of:

preparing a metal plate;

forming a metal frame having at least the IC chip supporting section pattern on which an IC chip is mounted, a coil pattern, and a connecting terminal pattern formed at an end of the coil pattern, by patterning the metal plate;

mounting the IC chip on the IC chip supporting section;

electrically connecting the connecting terminal pattern to the IC chip using wires; and

encapsulating the IC chip , the IC chip supporting section, wires, the tape and the metal frame with a resin.

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18. (Currently Amended) An electrophotographic apparatus on which a detachable process cartridge is mounted, consisting of comprising :

a semiconductor device including an IC chip for storing and processing information to be transmitted;

an IC chip supporting section for mounting the IC chip thereon;

a coil for generating an induction field,

~~and~~ connecting terminals provided at an end of the coil ~~and~~

~~electrically connected to the IC chip;~~

wires connecting the IC chip and the connecting terminals;

sheets of tape bonding and fixing a part of one side of the coil; and

a resin integrating the IC chip, the IC chip supporting section, the coil, the wires, the connecting terminals, and the sheets of tape with one another;

wherein the IC chip supporting section, the coil, and the connecting terminals are formed of the same metal plate that is patterned;

the process cartridge on which the semiconductor device is stuck; and

a transmission-reception unit for receiving information from and

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transmitting information to the semiconductor device.
